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an etalon structure with
a tapered spacer region being tapered along a taper direction; and
a linear optical detector array disposed along the taper direction, the collimating optics being disposed between the fiber optic input and the linear variable filter to illuminate the linear variable filter with a collimated light beam, wherein the linear variable filter is affixed to the linear optical detector array.

Sub B/alpha

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27. An optical spectrometer comprising:

a fiber optic input;
collimating optics;
a linear variable filter having a tapered spacer region being tapered along a taper direction and a thermal stability of less than 50 parts per million per degree Centigrade of ambient temperature change; and
a linear optical detector array disposed along the taper direction, the collimating optics being disposed between the fiber optic input and the linear variable filter to illuminate the linear variable filter with a collimated light beam.

28. The optical spectrometer of claim 27 wherein the linear variable filter is a linear variable band edge filter.

29. An optical spectrometer comprising:

a fiber optic input;
collimating optics;
a linear variable band edge filter with a tapered spacer region being tapered along a taper direction; and
a linear optical detector array disposed along the taper direction, the collimating optics being disposed between the fiber optic input and the linear variable filter to illuminate the linear variable filter with a collimated light beam.

30. An optical transmission network comprising:

an input optical fiber configured to carry a plurality of wavelength-division-multiplexed optical signals having nominal channel spacing of about 200 GHz or less;